

Attachment D – ACL Complaint No. R5-2011-0590
Specific Factors Considered for Administrative Civil Liability
Napa Berryessa Resort Improvement District Wastewater Treatment Facility

The State Water Board's *Water Quality Enforcement Policy* (Enforcement Policy) establishes a methodology for determining administrative civil liability by addressing the factors that are required to be considered under California Water Code (CWC) section 13385(e). Each factor of the nine-step approach is discussed below, as is the basis for assessing the corresponding score. The Enforcement Policy can be found at:

http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final111709.pdf.

Step 1 – Potential for Harm for Discharge Violations

The “potential harm to beneficial uses” factor considers the harm that may result from exposure to the pollutants in the illegal discharge, while evaluating the nature, circumstances, extent, and gravity of the violation(s). A three-factor scoring system is used for each violation or group of violations: (1) the potential for harm to beneficial uses; (2) the degree of toxicity of the discharge; and (3) whether the discharge is susceptible to cleanup or abatement.

Factor 1: Harm or Potential Harm to Beneficial Uses.

A score between 0 and 5 is assigned based on a determination of whether the harm or potential for harm is negligible (0) to major (5). In this case the potential harm to beneficial uses was determined to be “below moderate” (i.e., a score of 2), which is defined as “less than moderate threat to beneficial uses (i.e., impacts are observed or reasonably expected, harm to beneficial uses is minor).” The score of 2 is assessed because the wastewater was treated to secondary levels before it spilled into surface waters, and because it received significant dilution since the spills occurred during rainfall events

Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge. A

score between 0 and 4 is assigned based on a determination of the risk or threat of the discharged material. In this case a score of 2 was assigned. A score of 2 means that the chemical and/or physical characteristics of the discharged material have some level of toxicity or pose a moderate level of concern regarding receptor protection. Although the wastewater was treated to secondary standards, the wastewater treatment plant is only designed to treat the wastewater for a discharge to land. Discharges to surface water typically must be treated to a higher standard to prevent aquatic toxicity.

Factor 3: Susceptibility to Cleanup or Abatement.

A score of 0 is assigned for this factor if 50% or more of the discharge is susceptible to cleanup or abatement. A score of 1 is assigned if less than 50% of the discharge is susceptible to cleanup or abatement. This factor is evaluated regardless of whether the discharge was actually cleaned up or abated by the discharger. In this case, cleanup or abatement was not possible and therefore, a factor of 1 is assigned.

Final Score – “Potential for Harm”

The scores of the three factors are added to provide a Potential for Harm score for each violation or group of violations. In this case, a **final score of 5** was calculated. The total score is then used in Step 2, below.

Step 2 – Assessment for Discharge Violations

This step addresses administrative civil liabilities for the spills based on both a per-gallon and a per-day basis.

1. Per Gallon Assessments for Discharge Violations

When there is a discharge, the Board is to determine an initial liability amount on a per gallon basis using on the Potential for Harm score and the Extent of Deviation from Requirement of the violation.

The Potential for Harm Score was determined in Step 1, and is 5. The Extent of Deviation is considered “major” because the discharge of wastewater to surface waters is expressly prohibited by Prohibition A.1 of the Waste Discharge Requirements. Therefore, the discharges rendered the prohibition ineffective. Table 1 of the Enforcement Policy (p. 14) is used to determine a “per gallon factor” based on the total score from Step 1 and the level of Deviation from Requirement. For this particular case, the factor is 0.15. This value is multiplied by the volume of discharge and the per gallon civil liability, as described below.

Based on the weekly spill summaries provided by the Discharger, the discharge volume was 10,531,729 gallons. Because the volume of the discharge is so great, it is considered a “high volume discharge” under the Enforcement Policy. For high volume discharges, the Enforcement Policy allows a value of either \$2/gallon (for sewage) or \$1/gallon (for recycled water) instead of the maximum civil liability of \$10/gallon allowed under CWC section 13385. In this case, it is appropriate to use the \$1/gallon civil liability for recycled water because the wastewater was treated to secondary standards before it flowed out of the tailwater pond or off of the sprayfields. The California Department of Public Health allows secondary-treated wastewater to be applied as recycled water under certain conditions.

CWC section 13385(c)(2) states that the civil liability amount is to be based on the number of gallons discharged but not cleaned up, over 1,000 gallons for each spill event. These particular spills started and stopped several times (see Attachment C) and therefore, of the 10,531,729 gallons that spilled, a total of 10,525,729 gallons were discharged in excess of 1,000 gallons per spill event.

The Per Gallon Assessment is calculated as (0.15 factor from Table 1) x (10,525,729 gallons) x (\$1 per gallon). The value is \$1,578,859.

2. Per Day Assessments for Discharge Volumes

When there is a discharge, the Board is to determine an initial liability amount on a per day basis using the same Potential for Harm and the Extent of Deviation from Requirement that were used in the per-gallon analysis. The “per day” factor (determined from Table 2 of the Enforcement Policy) is 0.15.

The spills that are the subject of this enforcement action occurred for a total of 224 days over a two year period. The Enforcement Policy allows a reduction in civil liability for violations that last more than 30 days (p. 18), if certain findings can be made. As described in paragraph 21 of the Complaint, the spills did not result in economic benefit from an illegal conduct that can be measured on a daily basis. Therefore, the number of days can be reduced in the civil liability calculation, as follows: count the first day of violation, every fifth day up to 30 days, and then every 30 days. In this case, violations are counted as Day 1, 5, 10, 15, 20, 25, 30, 60, 90, 120, 150, 180, and 210, for a total of 13 days of violation.

The Per Day Assessment is calculated as (0.15 factor from Table 2) x (13 days) x (\$10,000 per day). The value is \$19,500.

Initial Liability Amount: The value is determined by adding together the per gallon assessment and the per day assessment. For this case, the total is \$1,578,859 + \$19,500 for a total initial liability amount of \$1,598,359. For ease of calculation in future steps, this value has been rounded to **\$1.6 million**.

Step 3 – Per Day Assessment for Non-Discharge Violation

The Enforcement Policy states that the Board shall calculate an initial liability for each non-discharge violation. In this case, this factor does not apply because all of the violations are related to the discharge of wastewater, and the liability was determined in Step 2.

Step 4 – Adjustment Factors

There are three additional factors to be considered for modification of the amount of initial liability: the violator's culpability, efforts to cleanup or cooperate with regulatory authority, and the violator's compliance history.

Culpability

Higher liabilities should result from intentional or negligent violations as opposed to accidental violations. A multiplier between 0.5 and 1.5 is to be used, with a higher multiplier for negligent behavior. The Discharger was given a multiplier value of 1.2, because it has known for many years that it is unable to store its wastewater during the winter and there is a history of spills from the tailwater pond and sprayfields. This Discharger has been issued three Cease and Desist Orders. The first was adopted 1996, and required that the Discharger increase its storage and disposal capacity by September 2000. If the Discharger had complied with the initial CDO and constructed additional storage and disposal capacity, it would have prevented 10.5 million gallons of wastewater from spilling during the last two years.

Cleanup and Cooperation

This factor reflects the extent to which a discharger voluntarily cooperated in returning to compliance and correcting environmental damage. A multiplier between between 0.75 and 1.5 is to be used, with a higher multiplier when there is a lack of cooperation. The Discharger was given a neutral multiplier value of 1 because the Discharger provided prompt notification of discharge events.

History of Violation

When there is a history of repeat violations, the Enforcement Policy requires a minimum multiplier of 1.1 to be used. Since 1995, the Discharger has been issued numerous enforcement letters for violations at the facility. Because of the continued failure to comply with the WDRs, the Central Valley Water Board adopted three CDOs, of which the last two have included a Connection Restriction. The primary compliance issue is the discharge of treated wastewater to surface water drainage courses and to Lake Berryessa. The discharges are associated with inflow and infiltration (I/I) into the sewer system and inadequate wastewater storage and disposal capacity to accommodate influent flows during the winter. The Discharger has completed some I/I assessment studies. However, the Discharger has not made the necessary improvements to cease the unauthorized discharges to surface waters. The Discharger was given a history of violation value of 1.1.

Step 5 - Determination of Total Base Liability Amount

The Total Base Liability is determined by applying the adjustment factors from Step 4 to the Initial Liability Amount determined in Step 2.

Total Base Liability Amount: This value is calculated as the Initial Liability Amount (\$1,600,000) X Adjustment Factors (1.2) (1) (1.1) and is equal to \$2,112,000. However, for ease of use, this value has been rounded to **\$2.1 million**.

Step 6 - Ability to Pay and Ability to Continue in Business

The Napa Berryessa Resort Improvement District (District) serves approximately 330 service connections. In April 2010 a new concessionaire (Pensus Group) signed an agreement with the US Bureau of Reclamation to operate the former Steele Park Resort (now known as Lupine Shores). It is Board staff's understanding that once a new collection system is constructed, Pensus will discharge its waste to the District's Wastewater Treatment Facility. The Napa County Board of Supervisors serves as the Resort Improvement District's Board of Directors, but the District is a separate legal entity from the County. Because the District has a limited income base, it has been loaned over \$1 million by Napa County to pay for capital improvements, maintenance and repairs to the treatment facility and collection system. In its 8 August 2011 letter, the District asserts that without a fully operating resort it lacks an adequate revenue stream to meet its existing obligations, let alone pay civil liabilities. The District states that its budget shortfall for fiscal year 2010-2011 is \$205,000, and that it does not believe that Napa County will loan it money to pay a civil liability. In February 2011, the District approved a 70 percent rate increase in water and sewer usage fees.

The ability to pay and to continue in business factor must be considered when assessing administrative civil liabilities. Based on the statutory requirement that an administrative liability must capture, at a minimum, the economic benefit derived from the violations, and considering the District's limited revenue base, history of operating loss and general lack of ability to pay, this factor should result in a reduction of the civil liability to the amount of the economic benefit (determined below), before the remaining factors are considered.

Step 7 – Other Factors as Justice May Require

If the Central Valley Water Board believes that the amount determined using the above factors is inappropriate, the amount may be adjusted under the provision for “other factors as justice may require,” but only if express findings are made to justify this.

The Central Valley Water Board has issued two recent civil liabilities to the Lake Berryessa Resort Improvement District (LBRID) for spills of millions of gallons of wastewater to Lake Berryessa. Although separate legal entities than the County, both LBRID and NBRID are governed by the Napa County Board of Supervisors and Napa County staff manages and operates both facilities. Both facilities have similar issues, namely, lack of winter storage and high rates of inflow/infiltration (I/I). It is appropriate to consider the magnitude of civil liability incurred by LBRID when determining the liability amount for NBRID.

LBRID is subject to two recent ACL Orders: (a) ACL Order R5-2005-0072 was issued for spills of 4.1 million gallons of partially treated wastewater and is in the amount of \$400,000 (b) ACL Order R5-2011-0538 was issued for the spills of 3.8 million gallons of partially treated wastewater and requires payment of \$8,300 and includes a suspended liability of \$360,000, contingent upon making improvements to prevent future discharges.

Napa Berryessa Resort Improvement District has spilled 10.5 million gallons of secondary treated wastewater, and this Complaint proposes a much smaller civil liability which is mainly based on an ability to pay analysis. This civil liability is substantially less than what has been issued to the Lake Berryessa Resort Improvement District for the same type of violation, and it could be argued that the liability should be increased.

Costs of Investigation and Enforcement Adjustment

The costs of investigation and enforcement are “other factors as justice may require”, and should be added to the liability amount. Over the last two years, staff of the Central Valley Water Board has spent over 100 hours associated with the investigation of the discharges and preparation of the enforcement action. The State Water Board Office of Enforcement has directed that all regions are to use a value of \$150 per hour for staff costs. For this case, staff time through preparation of the Complaint is \$15,000. The Enforcement Policy states that staff costs are to be added to the liability amount.

Step 8 – Economic Benefit

Pursuant to CWC section 13385(e), civil liability, at a minimum, must be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation. In general, the discharges were due to inflow/infiltration within the collection system and lack of winter storage capacity. The Discharger has estimated that it will cost approximately \$4 million to come into compliance with its permit. The economic benefit gained by non-compliance is the interest on a loan to complete the work. Water Board staff used a time-value-of-money

calculator¹ to estimate the economic benefit. During a recent meeting, the Discharger estimated that it will cost approximately \$4 million to bring the facility into compliance. The economic benefit is the interest saved between January 2012 (the date for facility improvements in the 2006 CDO) and October 2015 (the date for facility improvements in the 2010 CDO), and is estimated to be \$285,000.

The Enforcement Policy states (p. 21) that the total liability shall be at least 10% higher than the economic benefit, “so that liabilities are not construed as the cost of doing business and the assessed liability provides a meaningful deterrent to future violations.”

Final adjusted liability

The adjusted liability is \$285,000 (economic benefit) plus \$15,000 (staff costs) plus \$30,000 (deterrent) for a total of \$330,000

Step 9 – Maximum and Minimum Liability Amounts

The maximum and minimum amounts for discharge violation must be determined for comparison to the amounts being proposed. These values are calculated in the ACL Complaint, and the values are repeated here.

Maximum Liability Amount: \$105,322,890

Minimum Liability Amount: the minimum liability is equal to the economic benefit, which estimated to be \$285,000.

Step 10 – Final liability Amount

The final liability amount consists of the added amounts for each violation, with any allowed adjustments, provided amounts are within the statutory minimum and maximum amounts. Without further investigation of the discharge, calculation of economic benefits, and additional staff time, the proposed Administrative Civil Liability is **\$330,000**.

For ease of reference, the Enforcement Policy adjustment factors used in this civil liability calculation are tabulated below:

¹ <http://www.zenwealth.com/BusinessFinanceOnline/TVM/TVMCalculator.html>

Adjustment Factors

Adjustment Factors	Range	Factors Used
Harm or Potential Harm to Beneficial Uses	0 to 5	2
Physical, Chemical, Biological or Thermal Characteristics of the Discharge	0 to 4	2
Susceptibility to Cleanup or Abatement	0 or 1	1
Final Score	0 to 10	5
Per Gallon Assessment	Minor, Moderate, Major	Major
Per Day Assessment	Minor, Moderate, Major	Major
Culpability	0.5 to 1.5	1.2
Cleanup and Cooperation	0.75 to 1.5	1
History of Violations	Subjective, based on history	1.1
Ability to Pay	Based on financial information	Use economic benefit
Other Factors as Justice May Require	10% penalty as a deterrent	-
Economic Benefit	\$285,000	
Staff costs	\$15,000	